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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/549,328	04/13/2000	Shawn P. McAllister	1400.4100231	7384

25697 7590 06/04/2004

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EXAMINER	
BLAIR, DOUGLAS B	

ART UNIT	PAPER NUMBER
2142	6

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/549,328	Applicant(s) MCALLISTER ET AL.	
	Examiner Douglas B Blair	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,560,654 to Fedyk et al..

3. As to claim 20, Fedyk teaches a congestion notification processor, comprising: a processing module; memory operably coupled to the processing module, wherein the memory stores operating instructions that, when executed by the processing module, cause the processing module to perform functions including: detecting control plane congestion at a network element in a signaling network (col. 5, lines 13-30); generating a congestion notification corresponding to the control plane congestion (col. 5, lines 13-30); providing the congestion notification to at least one additional network element in the signaling network, wherein the at least one additional network element utilizes the congestion notification for routing control traffic around the network element at which the control plane congestion has been detected (col. 5, lines 31-60).

4. As to claim 21, Fedyk teaches the congestion notification processor of claim 20, wherein the memory stores operating instructions that, when executed, cause the processing module to provide congestion via routing plane within the signaling network (col. 5, lines 13-30).

5. As to claim 22, Fedyk teaches the congestion notification processor of claim 21, wherein the memory stores operating instructions that, when executed, cause the processing module to provide the congestion notification via the routing plane such that the congestion notification is provided to neighboring network elements proximal to the network element (col. 5, lines 13-60).

6. As to claim 23, Fedyk teaches the congestion notification processor of claim 20, wherein the memory stores operating instructions that, when executed, cause the processing module to provide congestion notification via a signaling plane within the signaling network (col. 4, lines 9-37).

7. As to claim 24, Fedyk teaches the congestion notification processor of claim 20, wherein the memory stores operating instructions that, when executed, cause the processing module to proceed the congestion notification in response to a received connection setup message generated by a source node in the network, wherein the at least one additional node includes the source node (col. 5, lines 13-60).

8. As to claim 25, Fedyk teaches the congestion notification processor of claim 24, wherein the memory stores operating instructions that, when executed cause the processing module to provide the congestion notification via a signaling plane wherein the signaling network, wherein the congestion notification is proceeded to each network element along a path traversed by the connection setup message (col. 5, lines 13-60).

9. As to claim 26, Fedyk teaches the congestion notification processor of claim 20, wherein the congestion indication includes at least one congestion parameter from the set of congestion parameters that includes: a congestion type that distinguishes between node congestion and link congestion, a congestion location, and a congestion level (col. 5, lines 45-60).

10. As to claim 27, Fedyk teaches the congestion notification processor of claim 20, wherein the signaling network is included in at least one of a packet-based communication network and a cell-based communication network (col. 4, lines 9-20).

11. As to claim 28, Fedyk teaches the congestion notification processor of claim 27, wherein the signaling network is a source routed control network (col. 4, lines 9-20).

12. As to claim 29, Fedyk teaches the congestion notification processor of claim 28, wherein the signaling network is included in an ATM network utilizing a Private Node Network Interface (PNNI) routing and signaling protocol (col. 3, lines 32-45).

13. As to claims 1-10, they feature the same limitations as claims 20-29 and are rejected for the same reasons as claims 20-29.

14. As to claim 30, Fedyk teaches the congestion notification processor of claim 22, wherein utilization of the congestion notification by the at least one additional network element further comprises at least one of: updating routing tables, generating a congestion database, propagating the congestion notification to additional elements in the network, and compiling statistics reflecting network performance (col. 5, lines 45-60).

15. As to claim 31, Fedyk teaches the congestion notification processor of claim 22, wherein the congestion notification includes a congestion level and wherein utilization of the congestion notification further comprises reducing control traffic to the network element at which the control plane congestion has been detected, wherein an amount of reduction in control traffic to the network element is based on the congestion level (col. 5, lines 32-44).

16. As to claim 32, Fedyk teaches a connection processor, comprising: a processing module; memory operably coupled to the processing module wherein the memory stores operating

instructions that, when executed by the processing module, cause the processing module to perform functions including: receiving a request to establish a connection in a communication network, wherein the request includes a destination (col. 5, line 13-30); determining a first routing path for the connection based on the network parameters, wherein the network parameters include communication network topology information and congestion information corresponding to at least one previously received congestion indication (col. 5, lines 31-60); and sending a first connection setup message along the first routing path (col. 6, lines 4-22).

17. As to claim 33, Fedyk teaches the connection processor of claim 32, wherein the memory stores additional instructions that, when executed by the processing module, cause the processing module to perform the additional functions of: receiving an indication of control plane congestion at a congestion point along the first routing path (col. 5, lines 13-60); determining a second routing path for the connection using the network parameters and the indication of control plane congestion (col. 6, lines 4-22); and sending a second connection setup message along the second routing path (col. 6, lines 4-22).

18. As to claim 34, Fedyk teaches the connection processor of claim 33, wherein the processing module stores the network parameters in a table, and wherein memory stores operating instructions that when executed, cause the processing module to add congestion information included in the indication of control plane congestion to the network parameters stored in the table (col. 5, lines 45-60).

19. As to claim 35, Fedyk teaches the connection processor of claim 34, wherein the memory stores operating instructions that, when executed, cause the processing module to remove the congestion information from the table after a predetermined time period (col. 6, lines 19-28).

20. As to claim 36, Fedyk teaches the connection processor of claim 35, wherein the congestion information includes a level of congestion, and wherein the predetermined time period is based on the level of congestion (col. 6, lines 19-28).

21. As to claim 37, Fedyk teaches the connection processor of claim 33, wherein the memory stores operating instructions that, when executed, cause the processing module to perform an additional function of relaying the indication of control plane congestion to at least one additional node in the communication network (col. 6, lines 4-22).

22. As to claim 38, Fedyk teaches the connection processor of claim 33, wherein the memory stores operating instructions that, when executed, cause the processing module to store congestion information included in the indication of control plane congestion (col. 6, lines 4-22).

23. As to claim 39, Fedyk teaches the connection processor of claim 33, wherein the indication of control plane congestion is received by the processing module via a routing plane (col. 5, lines 13-30).

24. As to claim 40, Fedyk teaches the connection processor of claim 33, wherein the indication of control plane congestion is received by the processing module via a signaling plane (col. 4, lines 9-37).

25. As to claims 11-19, the have the same limitations as claims 32-40 and are rejected for the same reasons as claims 32-40.

26. As to claim 41, Fedyk teaches a method for communicating control plane congestion information in signaling network, comprising: detecting control plane congestion at a network element (col. 5, lines 13-30); generating a congestion notification corresponding to the control plane congestion, wherein the congestion notification includes a congestion level (col. 5, lines

13-30); providing the congestion notification to at least one additional network element in the signaling network (col. 5, lines 13-30), wherein the at least one additional network element utilizes the congestion notification for reducing control traffic to the network element at which the control plane congestion has been detected, wherein an amount of reduction in control traffic to the network element is based on the congestion level (col. 5, lines 31-60).

27. As to claim 42, Fedyk teaches a method for communicating control plane congestion information in a signaling network, comprising: detecting control plane congestion at a network element (col. 5, lines 13-30); generating a congestion notification corresponding to the control plane congestion (col. 5, lines 13-30); providing the congestion notification to at least one additional network element in the signaling network (col. 5, lines 13-30), wherein the at least one additional network element utilizes the congestion notification for performing at least one of: updating routing tables, generating a congestion database, propagating the congestion notification to additional elements in the network, and compiling statistics reflecting network performance (col. 5, lines 45-60).

Response to Arguments

28. Applicant's arguments filed 3/18/2004 have been fully considered but they are not persuasive. The applicant argues the following points: (a) Fedyk does not appear to detect "control plane congestion"; (b) Fedyk does not appear to mention a routing plane or the use of a routing plane for providing a congestion notification; (c) Fedyk does not appear to mention a signaling plane or the use of a signaling plane for providing a congestion notification; (d) Fedyk does not teach a congestion notification including a congestion level; (e) Fedyk does not teach

reducing control traffic to the network element at which the control plane congestion has been detected; and (f) Fedyk does not appear to disclose the step of sending a first connection setup message along the first routing path.

29. As to point (a), the term control plain congestion is interpreted broadly. Part of the IP congestion detected can be considered control plain congestion. The claims are read in light of the specification however limitations from the specification are not read into the claims.

30. As to point (b), the term routing plain is interpreted broadly. Any congestion detected can be interpreted as using some form of routing plain. The specification and drawings do not appear to describe a specific hierarchy for the various plains claimed by the applicant.

31. As to point (c), any congestion notification can be considered to occur on a signaling plain.

32. As to points (d) and (e), the claims do not say that the amount of reduction in control traffic to the network element is based *proportionally* on the congestion level therefore any the reduction shown in figure 4 teaches claim 31 as interpreted broadly.

33. As to point (f), The message sent in step 302 of Figure 3 is considered a connection setup message.

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

Douglas Blair
May 31, 2004
DBB

JACK B. HARVEY
SUPERVISORY PATENT EXAMINER